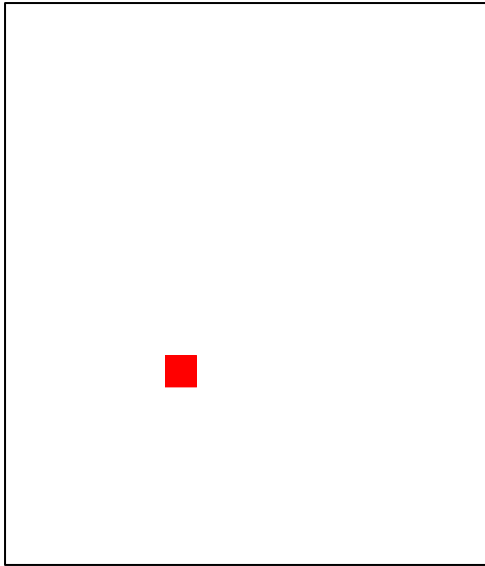


SOIL SURVEY IN
CATALONIA, SPAIN:
STEPS TOWARD A
NATIONAL
COOPERATIVE EFFORT

CATALONIA, SPAIN



FRANCE

MEDITERRAIN
OCEAN

PHYSIOGRAPHY

Pyrenees
mountains

Inter-mountains
and coastal
ranges

Ebro basin

Area:

- 3.210.667 ha
- 7.930.372 acres

Population:

- 7 million people

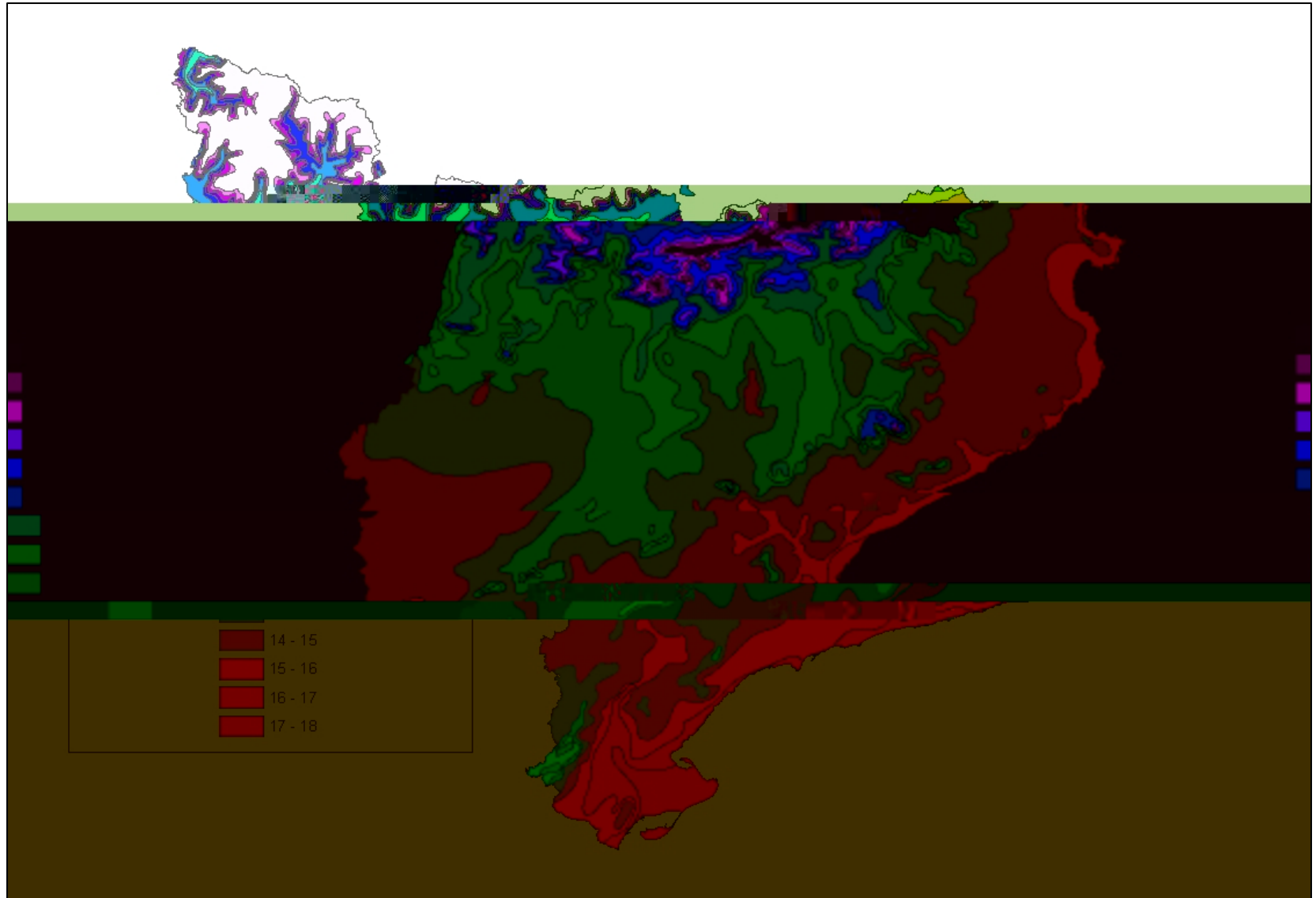
Land Use:

- Forestry: 60%
- Agriculture: 29%
- Urban: 6%
- Miscellaneous: 5%

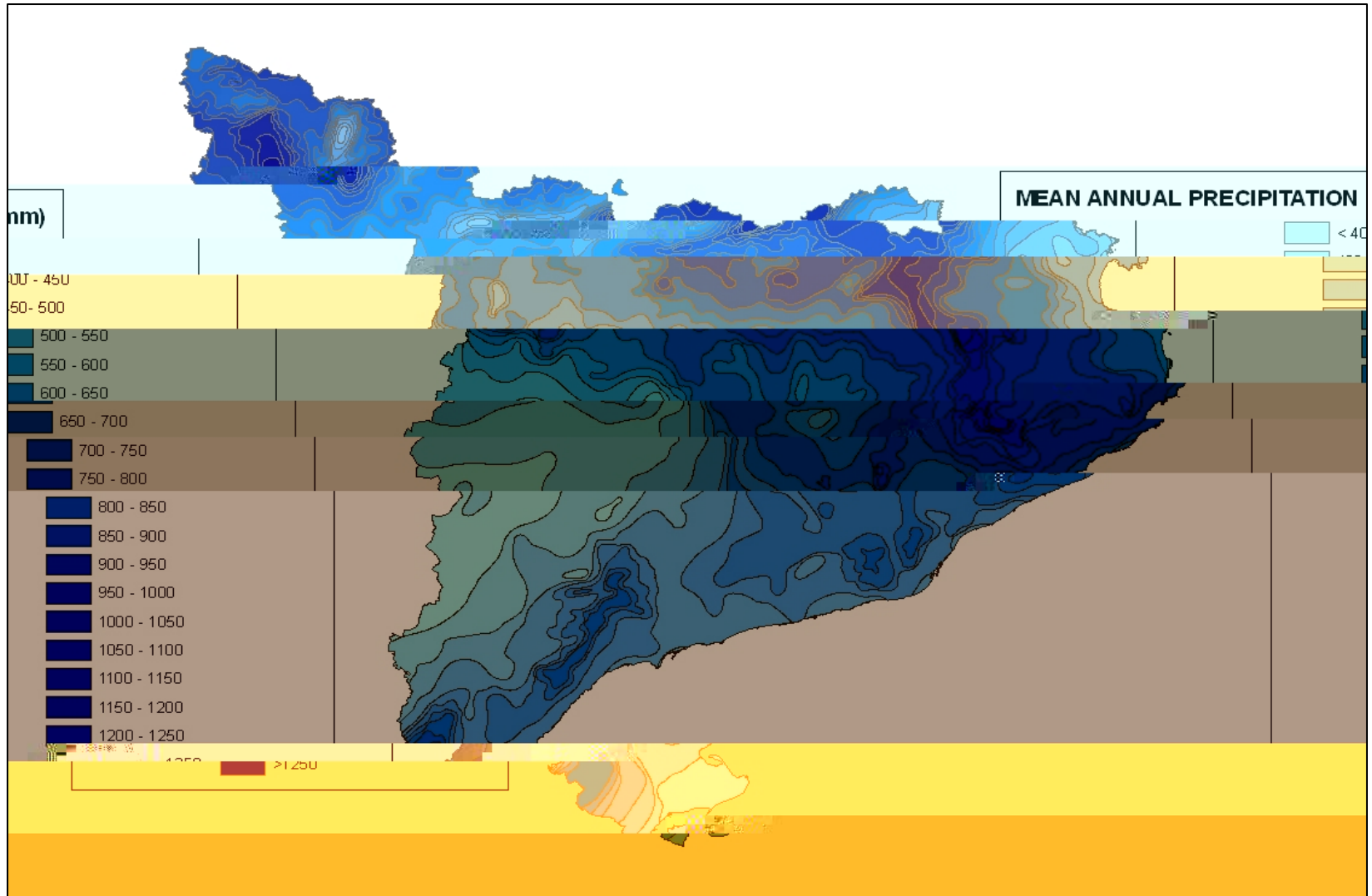
CLIMATE

- Dry Mediterranean
 - Hot Summers
 - Mild Winters

MEAN ANNUAL AIR TEMPERATURE



MEAN ANNUAL PRECIPITATION



COOPERATIVE EFFORT



Current Partners:

-IGC

-ICC

-University of Lleida

-Dpt. of Agriculture

PROJECT OBJECTIVES

- **Soil Mapping of Catalonia**
 - **1:25,000**
 - **1:250,000**
- **Soil Database Development (attributes dataset)**
 - **Threats to Soil - soil erosion, salinitation, desertification, decline in organic matter, sealing, compaction, soil protection, etc.**
- **Soil Information System (spatial dataset)**

Methodology

- Soil Survey Manual**
- National Soil Survey Handbook**
- Soil Classification**
 - Soil Taxonomy**
 - WRB**
- Laboratory Analyses**
 - Spanish official system**

ORDER 2 MAPPING

SCALE 1:25.000

304 maps

PRIORITY AREAS

MAPPING APPROACH

IGC staff

- SS Quality Assurance
- Map Finishing

External Consultants

- Soil mapping
- SS Quality Control
- Database development

SOIL MAP REPORT: MANUSCRIPT

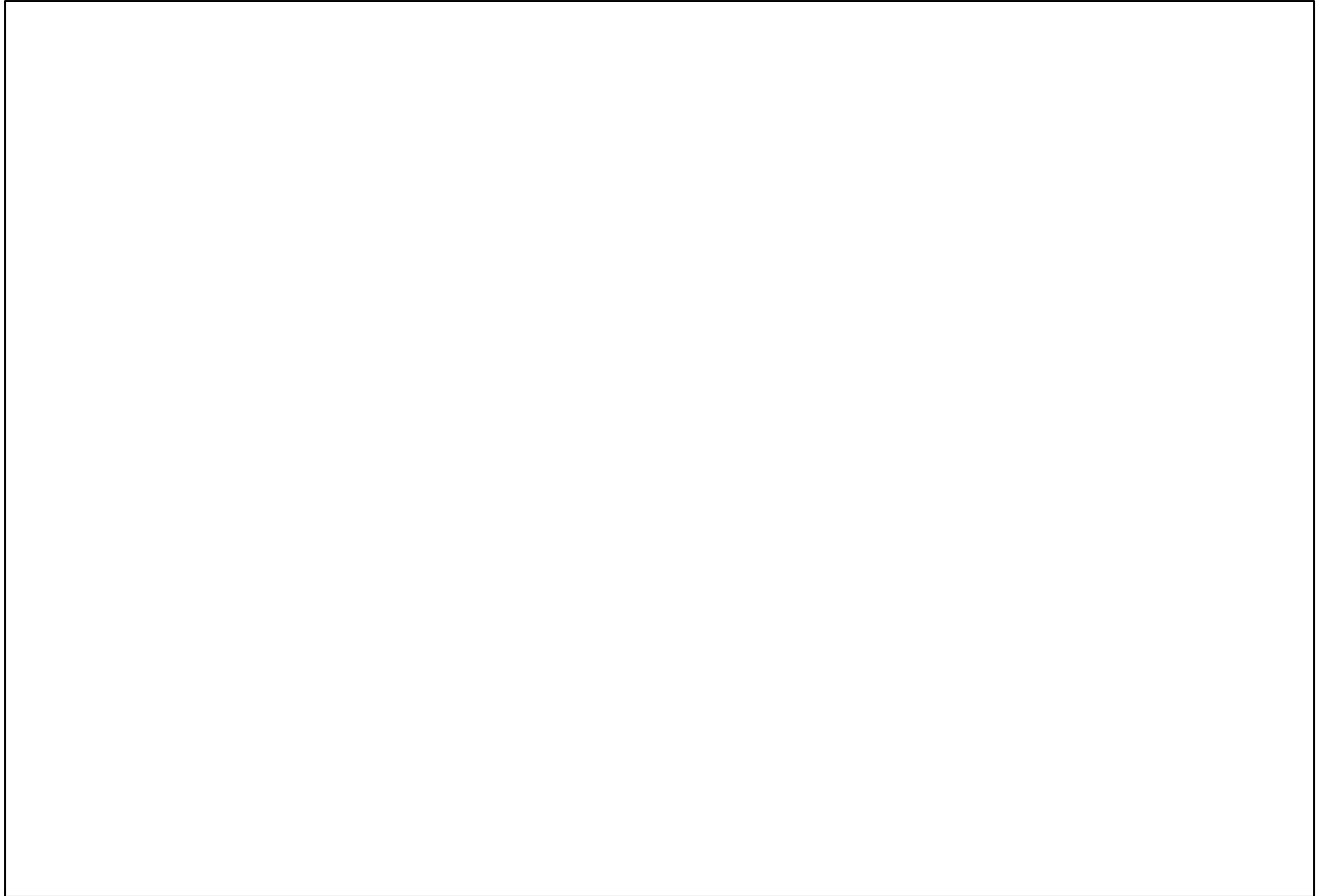
- MAIN REPORT

- INTRODUCTION**
- HOW TO USE THIS SOIL MAP**
- DESCRIPTION ON THE STUDY AREA**
- THE SOILS: LEGEND AND MAP UNITS**
- SOIL PROPERTIES AND CHARACTERISTICS**
- SOIL FORMATION**
- SOIL CLASSIFICATION**

- ANNEXES TO THE MAIN REPORT

- METHODOLOGY**
- CRITERIA FOR SOIL SURVEY DESCRIPTION**
- DESCRIPTION OF THE SOIL SERIES**
- CHEMICAL ANALYSES**
- HYDROLOGICAL CHARACTERIZATION**
- PROFILES FORMS**

SOIL MAP



POLITICAL DIVISIONS

41 maps

INTERNET ACCESS

GENERAL SOIL MAP

- Scale at 1:250.000**
- Linked to the standards of the European Union (EU 1:250.000 project)**

CHALLENGES & OPPORTUNITIES

- Soil moisture regimes**
- Anthropogenic soils**





Bench Terraces

NEXT STEPS

- HOW TO MAKE AVAILABLE SOIL INFORMATION

- GENERAL PUBLIC**
- OTHER POTENTIAL USERS**

- ENGAGEMENT OF OTHER ORGANIZATIONS TO FORM A NATIONAL COOPERATIVE SOIL SURVEY PROGRAM



MUCHAS GRACIAS!!